

Having regard to the foregoing disclosure, the patent of which this specification forms part confers, subject to the conditions prescribed in the Patent Act, 1935, the exclusive right, privilege and liberty of making, constructing, using and vending to others to be used, the invention as defined in claims submitted by the patentee as follows:

1. A paper box having outer and inner bottom, side and end walls, the outermost side walls being inclined upwardly and inwardly from the periphery of the outer bottom wall, the inner side walls extending downwardly from the upper edges of said outer walls and being connected to the inner bottom wall, said outer side walls having end flaps folded inwardly and disposed in planes extending upwardly and inwardly from approximately the end edges of said outer bottom wall, said outer and inner end walls being folded around said inwardly folded flaps so as to cause said outer end walls to assume an upwardly and inwardly inclined position, and the inner bottom member having end flaps extending upwardly adjacent said end walls.

2. A paper box having outer and inner bottom, side and end walls, the outermost side walls being inclined upwardly and inwardly from the periphery of the outer bottom wall, the inner side walls extending downwardly from the upper edges of said outer walls and being connected to the inner bottom wall, said outer side walls having end flaps folded inwardly and disposed in planes extending upwardly and inwardly from approximately the end edges of said outer bottom wall, said outer and inner end walls being folded around said inwardly folded flaps so as to cause said outer end walls to assume an upwardly and inwardly inclined position, and the inner bottom member having end flaps extending upwardly inside of said inner end walls so as to simulate, at the ends of the box, the inner side walls thereof.

3. A paper box having outer and inner, bottom, side and end walls, the outermost side and end walls being inclined upwardly and inwardly from the periphery of the outer bottom wall, the inner side walls extending downwardly between the upper edges of said outer side walls and the side edges of said inner bottom wall, said outer side walls having end flaps folded inwardly and disposed in planes extending upwardly and inwardly from approximately the end edges of said outer bottom wall, said outer and inner end walls being folded around said inwardly folded flaps so as to support said outer end walls in said upwardly and inwardly inclined position, means for holding said outer and inner end walls in said folded position around said flaps, and the inner bottom member having end flaps extending upwardly toward the upper edges of said end walls, said end flaps constituting, in effect, inner end walls extending between the upper edges of said outer end walls and the end edges of said inner bottom wall.

4. A paper box having an inner and outer bottom, side and end walls, said outer side and end walls being inclined upwardly and inwardly from the outer edges of said outer bottom wall and said inner side walls depending from the upper edges of said outer walls and extending in spaced relation thereto to the outer side edges of said inner bottom wall, said outer side walls having end flaps folded inwardly and disposed in planes extending upwardly and inwardly adjacent the inside of said outer end walls, said inner end walls being folded downwardly over the inside of said flaps, end extensions on said inner side walls for engaging adjacent portions of said downwardly folded inner end walls to hold the same in folded position adjacent the inside of said flaps, and said inner bottom member having end flaps extending upwardly from its ends in spaced relation to said end walls to the upper edge of said end walls.

5. A paper box having an inner and outer bottom, side and end walls, said outer side and end walls being inclined upwardly and inwardly from the outer edges of said outer bottom wall and said inner side walls depending from the upper edges of said outer walls and extending in spaced relation thereto to the outer side edges of said inner bottom wall, said outer side walls having end flaps folded inwardly and disposed in planes extending upwardly and inwardly adjacent the inside of said outer end walls, said inner end walls being folded downwardly over the inside of said flaps, end extensions on said inner side walls for engaging adjacent portions of said downwardly folded inner end walls to hold the same in folded position adjacent the inside of said flaps, and said inner bottom member having end flaps extending upwardly from its ends in spaced relation to said end walls to the upper edge of said end walls.

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S P E C I F I C A T I O N

BE IT KNOWN that JOHN D. CLARKE, a citizen of the United States and a resident of Chicago, in the County of Cook and State of Illinois, United States of America, having made an invention entitled

5       ANGULAR-WALLED CARTON

the following is a full, clear and exact disclosure of the nature of the said invention and of the best mode of realizing the advantages thereof.

This invention relates to the construction  
10      of an angular-walled carton of paperboard or like material. The carton contemplated is particularly adapted for the display of merchandise for sales purposes, its design being such that it presents an attractive and pleasing appearance.

15      The main objects of the invention are to provide a carton of attractive and pleasing appearance which may easily be made by automatic machinery of the type with which most box manufacturers are equipped; to provide a box construction which will be low in cost  
20      of production both in respect of labor and material; to provide a box which may be collapsed to flat condition for shipment and storage purposes but which may be quickly and easily set up to receptacle form and which, when set up, will be effectively locked in such form;  
25      and in general, it is the object of the invention to provide an improved carton or box of the character indicated.

Other objects and advantages of the invention will be understood by reference to the following specification and accompanying drawing wherein there  
30      is illustrated the construction of a box embodying a

selected form of the invention.

In the drawing:

Figure 1 is a plan of a blank from which  
the improved box may be formed;

5           Figure 2 is a plan of the box in pre-  
fabricated but collapsed condition, suitable for  
storage, shipment and other purposes;

Figure 3 is a fragmentary perspective of  
one end portion of the improved box structure;

10           Figure 4 is a perspective of the box in  
set-up condition;

Figure 5 is a section on the line 5--5 of  
Figure 4; and

15           Figure 6 is a section on the line 6--6 of  
Figure 5.

Referring now to the drawing, the box herein  
contemplated comprises inner and outer bottom walls 10  
and 11, respectively, outer side walls 12, 12, inner side  
walls 13, 13, outer end walls 14, 14, and inner end walls  
20 15, 15. The various inner and outer wall parts described  
are designated by the same reference numerals in the plan  
view of the blank, and it will be understood that the  
various wall parts are separated from each other by  
suitable crease or fold lines which facilitate bending  
25 of the various wall parts relative to each other to permit  
the blank to be set up into a box.

The inner bottom member 10 is provided with  
a flap 16 which is adapted to be adhesively united to  
the inner side wall 13 at the opposite side of the box,  
30 the flap 16 being preferably secured to the outside of  
the inner wall 13 as clearly indicated in Figures 2 and  
5. As shown in Figure 2, the blank has been fabricated

into a collapsed tubular form, the same being folded to flat condition by folding along one of the fold lines which separates an outer side wall 12 from the outer bottom wall 11, and along the fold line which 5 separates the oppositely disposed outer side wall 12 from its contiguous inner side wall 13. The combined width of the outer bottom wall and of one outer side wall is such as to equal the combined widths of the inner bottom wall, the two inner side walls and the 10 other outer side walls. Hence the folding to flat condition is readily permitted.

The outer side walls 12, 12 are provided with end flaps 17, 17 which are adapted to be folded inwardly from the ends of the respective side walls 15 from which they extend, said flaps being adapted to occupy an inclined position in a plane which extends inwardly and upwardly from approximately the end edges of the outer bottom member 11 at about the same angle that the outer side walls 12, 12 occupy relative to 20 the plane of the outer bottom member when the box is set up. The outer end walls 14, 14, may then be folded upwardly into an upwardly and inwardly extending position outside of and adjacent the folded end flaps 17, and the inner end walls 15, 15 may then be folded downwardly and inwardly around said end flaps. 25

To retain the end walls 14, and 15, in such folded condition, the inner side walls 13, 13 are provided with end extensions 18, 18 which project beyond the ends of the inner bottom member 10 and engage end 30 extensions 15a of said inner end walls 15 as best shown in Figures 5 and 6. It will be understood that in setting up the carton, the first step is to adjust the collapsed

tubular form as shown in Figure 2 to an erected position wherein the outer side walls 12, 12 extend upwardly and inwardly as shown in Figure 5, and the inner side walls 13, 13 depend substantially vertically. Hence, the end  
5 extensions 18, 18 of the said inner side walls 13 are in place before the end walls 14 and 15 are folded around the tongues 17, 17. The opposite end portions of the inner end walls 15, 15, however, may be tucked into position behind the ends of the said end extensions 18,  
10 or forced by said end extensions by springing the latter outwardly and permitting the same to snap inwardly in front of the inner end walls when the latter clear the free ends of said end extensions.

The inner bottom member 10 is also equipped  
15 with a pair of end flaps 19, 19, which are adapted to be folded upwardly from the ends of the inner bottom wall to occupy a substantially vertical position as best shown in Figure 6. Such end flaps 19, 19 thus occupy a position relative to the outer end walls 14 and 15 which causes  
20 said end flaps 19, 19 to simulate, at the ends of the box, the appearance of the inner side walls. Thus, the box is given a symmetrical appearance, notwithstanding the indicated angular position of the inner end walls 15, 15.

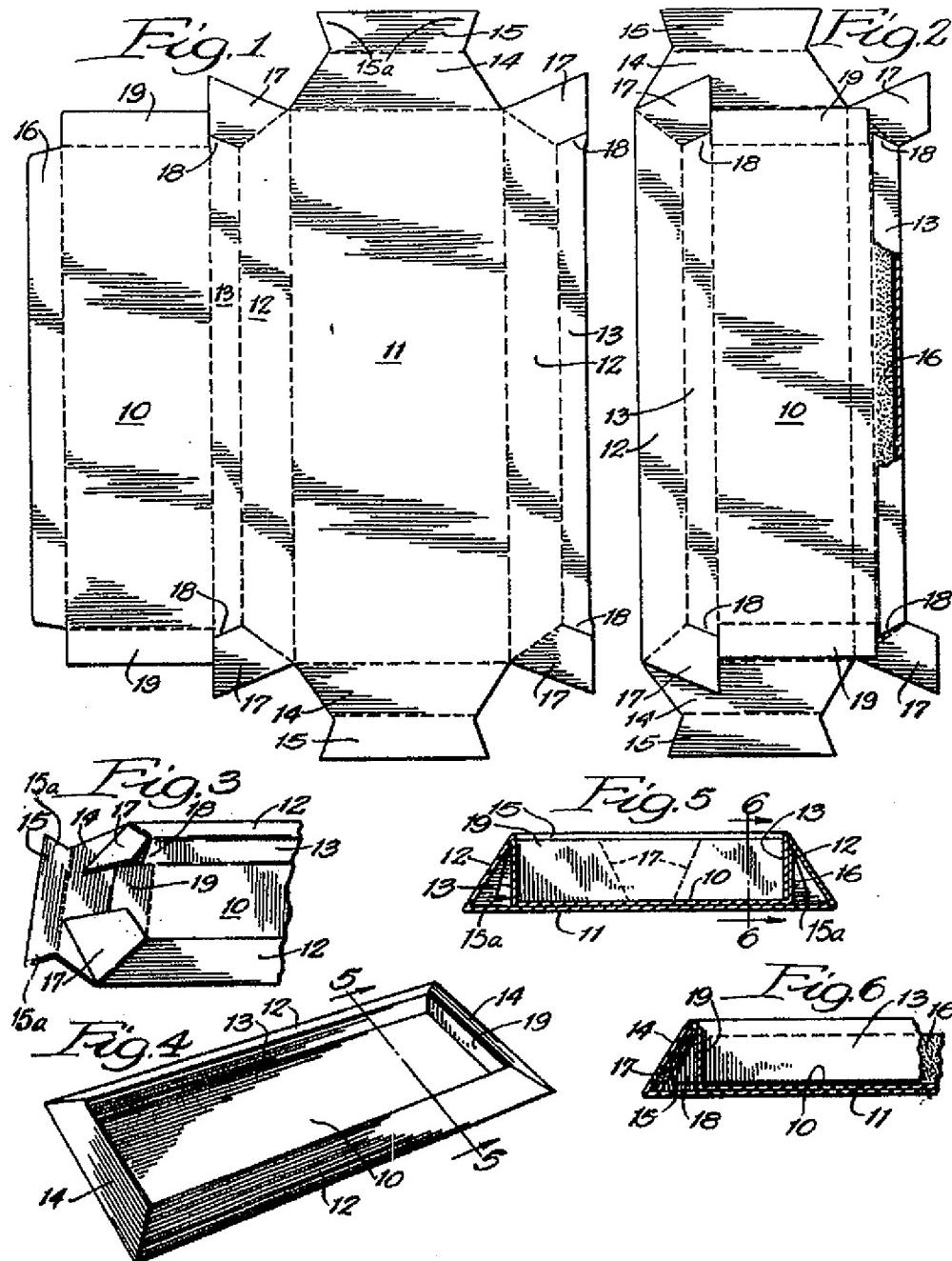
The described structure involves no complicated  
25 cutting or folding operations and it may be easily and rapidly fabricated to the collapsed tubular condition illustrated in Figure 2. From such collapsed tubular condition the structure may be quickly and easily adjusted to set-up box form for receiving the content for which the  
30 box is furnished. The structure, in addition to providing an attractive box, also provides a sturdy construction which will effectively protect the content against crushing

or other injury.

In the foregoing description and in the appended claims, the reference to certain parts of the structure by the words "sides" and "ends" is not intended to be limited to the long and short ends of a rectangular box construction, these terms being used only for purposes of clarity and explanation. Obviously, the structure may be re-arranged, for example, by supplying the tongues on the end walls 14, 14 instead of on the side walls 12, 12, and the inner bottom 10 as an extension of one or both of the end walls, 15, 15.

Other changes may also be made without departing from the spirit of the invention, the scope of which should be determined by reference to the following claims, the same being construed as broadly as possible, consistent with the state of the art.

416605



J. D. Blaue

INVENTOR

Certified to be the drawings referred to  
in the specification hereunto annexed.

Ottawa, December 23<sup>rd</sup> 1944 Alex. E. MacLean  
ATTORNEY